

IN THE CLAIMS:**1. (currently amended) A receiver, comprising:**

a higher frequency unit having a first input for receiving a first radio frequency signal from a first sensor, ~~and having~~ a second input for receiving a second radio frequency signal from a second sensor, having a first output for providing a first baseband signal corresponding to the first radio frequency signal, and having a second output for providing a second baseband signal corresponding to the second radio frequency signal, wherein for a first selection state, the first signal and the second signal represent a same information value; and

a baseband unit, coupled to said higher frequency unit, said baseband unit having at least one bypass signal and at least one output, said bypass signal selecting whether the output is a function of the first baseband signal combined with the second baseband signal based on at least the first selection state.

Cont

2. (currently amended) A receiver as in claim 1, wherein the ~~first signal received by the first sensor is a radio frequency signal, and wherein the second signal received by the second sensor is a radio frequency signal~~, higher frequency unit comprises:

a radio frequency unit having a first input for receiving the first radio frequency signal from the first sensor, having a second input for receiving the second radio frequency signal from the second sensor, a first output for providing a first intermediate frequency signal corresponding to the first radio frequency signal, and having a second output for providing a second intermediate frequency signal corresponding to the second radio frequency signal; and

an intermediate frequency unit having a first input for receiving the first intermediate frequency signal, a second input for receiving the second intermediate frequency signal, a first output for providing the first baseband signal, and a second output for providing the second baseband signal.

3. (original) A receiver as in claim 1, wherein said baseband unit comprises:

a filter, coupled to said higher frequency unit.

4. (original) A receiver as in claim 3, wherein said baseband unit further comprises:

a channel processing unit; coupled to an output of said filter, said channel processing unit generating the bypass signal.

5. (original) A receiver as in claim 4, wherein said baseband unit further comprises:
a demodulator; coupled to said channel processing unit.

6. (currently amended) A receiver as in claim 4, wherein said channel processing unit selectively combines the first baseband signal and the second baseband signal.

7. (currently amended) A receiver as in claim 1, wherein said higher frequency unit comprises:
a radio frequency unit having a first input for receiving the first radio frequency signal from the first sensor, having a second input for receiving the second radio frequency signal from the second sensor, and having an output.

8. (original) A receiver as in claim 7, wherein said higher frequency unit further comprises:
an intermediate frequency unit; having an input coupled to the radio frequency unit for receiving an analog signal from the radio frequency unit.

9. (original) A receiver as in claim 1, wherein said higher frequency unit provides information to said baseband unit in digital rather than analog form.

10. (original) A receiver as in claim 9, wherein all information provided by said higher frequency unit to said baseband unit is provided in digital rather than analog form.

11. (original) A receiver as in claim 9, wherein the first sensor is a first antennae and wherein the second sensor is a second antennae.

12. (original) A receiver as in claim 1, wherein said baseband unit comprises:
an echo canceller.

13. (original) A receiver as in claim 12, wherein said echo canceller performs echo cancellation when diversity combining is used in said baseband unit.

14. (original) A receiver as in claim 13, wherein use of echo cancellation is selectable.

15. (currently amended) A receiver, comprising:

first means for receiving a first signal from a first sensor and for receiving a second signal from a second sensor, wherein the first signal and the second signal represent a same information value for a first selection state, and wherein the first means translates the first and second signals to baseband; and

baseband means for generating a bypass signal and an output, said baseband means being coupled to said first means for receiving digital information relating to at least one of the first and second signals, wherein said bypass signal selects, based upon at least the first selection state, whether the output of the baseband means is a function of the first translated signal combined with the second translated signal.

16. (currently amended) A receiver as in claim 15, wherein said baseband means unit comprises:

an echo canceller.

17. – 19. Cancelled

20. (New Claim) A receiver as in claim 2, wherein said higher frequency unit provides the first baseband signal and second baseband signal to the baseband unit in digital rather than analog form.